In the Claims

Please replace the claims with the following clean version of the entire set of pending claims, in accordance with 37 CFR § 1.121(c)(1)(i).

A marked-up version showing amendments to any claims being changed is provided in one or more accompanying pages separate from this amendment in accordance with 37 CFR § 1.121(c)(1)(ii). Any claim not accompanied by a marked-up version has not been changed relative to the immediate prior version, except that marked-up versions are not being supplied for any added claim or canceled claim.

CLAIMS

1. A system for flushing at least one closed internal space of an objective, the flushing being performed by mixing at least two inert gasses in such a way that the refractive index resulting therefrom corresponds at least approximately to the refractive index of air.

2. The system as claimed in claim 1, wherein air or synthetic air having 78-80% nitrogen (N_2) by volume and 20-22% oxygen (O_2) by volume is provided.

3. The system as claimed in claim 1, wherein the objective is provided as an exposure projection objective for semiconductor lithography.

4. The system as claimed in claim 1, wherein in the case of use of two inert flushing gasses the refractive index of one flushing gas is above that of air, and the refractive index of the second flushing gas is below that of air.

5. The system as claimed in claim 4, wherein nitrogen is used as first flushing gas, and an inert gas is used as second flushing gas.

6. The system as claimed in claim 4, wherein helium is used as inert gas.

7. The system as claimed in claim 4, wherein krypton is used as inert gas.

8. The system as claimed in claim 4, wherein xenon is used as inert gas.

9. The system as claimed in claim 6, wherein nitrogen in a volumetric fraction of 95 to 99.5% and helium in a volumetric fraction of 0.5 to 5% are used.

10. The system as claimed in claim 9, wherein helium in a volumetric fraction of 1.1 to 1.3, preferably 1.2% is used.

11. A method for flushing at least one closed internal space of an objective, a mixture of at least two inert gasses being introduced into the at least one internal space via at least one inlet bore, whose refractive index resulting from the mixture corresponds at least approximately to the refractive index of air, after which the mixture is removed again from the internal space via at least one outlet bore.

12. A method for flushing at least one closed internal space of an objective, at least two inert gasses being passed into the internal space via at least one inlet bore in such a way that the refractive index resulting from the mixture of the gasses corresponds at least approximately to the refractive index of air, after which the mixture is removed via at least one outlet bore.

13. The method as claimed in claim 11, wherein the objective is provided as a projection objective for semiconductor lithography.

14. The method as claimed in claim 12, wherein the objective is provided as a projection objective for semiconductor lithography.

15. A lithographic projection apparatus for manufacturing semiconductors, a mixture of at least two inert gasses being provided for flushing at least one closed internal space of the exposure projection objective of the lithographic projection apparatus in such a way that the refractive index resulting therefrom corresponds at least approximately to the refractive index of air.

16. A method for producing microstructured components with the aid of an exposure projection objective, at least one closed internal space of the exposure projection objective being flushed with the aid of a mixture of at least two inert gasses in such a way that the refractive index resulting therefrom corresponds at least approximately to the refractive index of air.

Please new claims 17-19 as follows:

17. (New) The system as claimed in claim 1, wherein the at least two inert gases comprises only inert gases.

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18. (New) The system as claimed in claim 1, wherein the at least two inert gases is devoid of oxygen.

19. (New) The system as claimed in claim 1, wherein the at least two inert gases is devoid of air.